



NAVIGATING EMOTIONAL CHALLENGES: FACULTY RESPONSES TO AI INTEGRATION IN HIGHER EDUCATION

*Aruna Kumari Nuthanapati

Department of Management, VNR Vignana Jyothi Institute of Engineering & Technology, Hyderabad, Telangana State, India
(Corresponding Author)

ABSTRACT

The incorporation of Generative Artificial Intelligence (AI) technologies into educational environments has resulted in remarkable transformations, offering both prospects and difficulties. The processes and outcomes could be more efficient with AI intrusion to make personalized teaching and learning in students and teachers by challenges are to be addressed in this process. This study examines the emotional stress that faculty members encounter as they deal with the complexities brought about by AI in several aspects of their professional work and growth. The study adopted both quantitative and qualitative approach with two major concerns. Primarily, how teachers are managing the situation and second, how teachers perceive the AI intrusion on their emotional strain. The survey encompasses multiple aspects, such as the teachers' understanding of Generative AI integration in learning settings and their individual experiences with survey. Results found that many educators experience emotional strain and stress due to the perceived misalignment of AI tools with traditional teaching methods and the reduction in quality teacher-student interactions. Many faculty members also expressed uncertainty regarding the long-term implications of AI on their roles and job security. The shift toward AI-driven learning systems has led to a perceived erosion of pedagogical autonomy and personalized human interaction. Additionally, there is a notable demand for institutional support and targeted training to help educators adapt emotionally and professionally to the AI-integrated teaching landscape. The key findings emphasize that it is importance to address the emotional strain of faculty members as AI continues to play an integral role in higher education.

KEYWORDS: AI intrusion, Emotional strain, Modern education, Faculty Experience

INTRODUCTION

In addressing emotional challenges related to faculty response for AI intrusion in higher education, several key hurdles and considerations emerge such as quality and accuracy, ethical concerns, knowledge challenges, etc. These key considerations impact the teacher roles, curriculum development, training, and student engagement. The recent researchers, Alasadi & Baiz (2023) discuss the opportunities and challenges presented by generative AI in education, highlighting the paradigm shift it brings. The integration of Generative AI in education can positively empower and satisfy faculty by streamlining administrative tasks, enhancing teaching effectiveness, and fostering professional growth. The expansion of AI has the capacity to boost faculty motivation, contentment, and productivity (Lieff et al., 2012; Crompton & Song, 2021). However, it also introduces stress and anxiety due to the learning curve, job security concerns, and increased expectations, potentially leading to burnout and feelings of overwhelm. This paper concerns faculty emotional challenges with the intrusion of Generative AI including fear obsolescence, resistance to change, and technological anxiety and academic integrity. Because the potential reduction in personal interactions can lead to feelings of isolation, while the increased workload from integrating and adopting to AI can cause burnout. Addressing these challenges requires empathetic leadership, clear communication, and robust support systems.

This research is aimed at only two major concerns of how teachers are managing these challenges and what is their perception about AI intrusion on their roles and responsibilities. While there is a high level of awareness and recognition of AI's potential benefits, such as enhancing educational inclusivity and catering to diverse learning styles, there are significant challenges that need to be addressed. There is a palpable concern about job displacement and a strong demand for ethical guidelines to govern AI use in education. Despite these concerns, the general acceptance of AI shows a willingness among educators to adapt, provided that their emotional and professional challenges are acknowledged and addressed. This underscores the need for a balanced approach that supports faculty through this transition, ensuring that the adoption of AI enhances rather than diminishes the educational experience. The paper structure established with finding relevant research results through qualitative approach with higher education teachers in different age groups, cadres, and experience.

I. Related Studies

Higher educational institutions (HEIs) are facing a significant challenge in maintaining academic integrity due to the technological integration of generative artificial intelligence (AI). Various studies have shed light on different aspects of AI integration in education and how faculty perceive and engage with this technology (Zawacki-Richter et al. 2019). Researches are working on how proactive education on the ethical use of AI

to prepare students for the AI-driven future. (Song N.Y. 2024). A few studies are assessing the medical students and faculty attitudes toward AI in preparation integrating AI into medical education, especially in nursing education. (Wood et al. 2021) (Verhagen, 2023) Ghane (2024). These studies highlight the data privacy, concerns about job displacement, and evaluating the impact of AI-driven tools on instructor-student interactions. Alqodsi (2024) delves into the legal challenges of integrating AI technologies in education, particularly emphasizing the responsibilities that teachers bear in this context. The perceptions of educators on AI integration in higher education have been studied through practical application and examinations. (H.R.Amado-Salvatierra, et.al. (2024). However, the incorporation of AI literacy into the curriculum has presented time limitations and increased burdens on faculty members, leading to emotional fatigue (Wood et al., 2021). The faculty members' emotional distress caused by AI interference is also affected by aspects like as gender inequalities, conflicts in their roles, and the difficulties of managing emotional labour (El-Ibiary et al., 2017; Kinder et al., 2023; Richards et al., 2022). Two portions of the literature analysis examined how artificial intelligence (AI) affects educators' emotional well-being. AI is poised to transform personalised learning, intelligent tutoring, and administrative activities in education

(Ahmad, 2021; Harry, 2023; Mohaghegh, 2020). Base on the reviews and observations, it is identified that there are extensive gaps in emotional perseverance, preparation, experience in adopting Generative AI in the roles and responsibilities of higher education faculty. This emphasizes the importance of ensuring artificial intelligence (AI) integration in modern education where faculty response is pivotal.

II. Study Methodology

The study mainly aims to explore the emotional challenges that faculty encounter as they navigate and adapt to the increasing presence of AI technologies in teaching and learning environments. The study adopts a qualitative approach for exploring the emotional challenges, inculcating both interviews and surveys conducted and used only primary data for the analysis. Hence, the methodology has four steps, such as, questionnaire design, sampling, data collection and qualitative analysis. The questionnaire framed with two parts; (i) 10 questions on awareness and experience of AI interventions, and (ii) 9 questions on acceptance and adaptation of AI intrusion. The questionnaire and consolidated answers have present in the table no.2. To collect the primary data, stratified sampling technique is adopted and explained in the table no.1.

| Faculty | Age | | | Gender | | Experience | | |
|---------|-------|--------|-------|--------|--------|------------|--------|-----|
| | Young | Middle | Older | Male | Female | High | Medium | Low |
| % | 45% | 35% | 20% | 43% | 57% | 40% | 50% | 10% |
| No. | 111 | 86 | 51 | 106 | 142 | 99 | 124 | 25 |

Table 1: Sample size demographics

The study involves faculty members from various engineering colleges in Hyderabad of Telangana state, India. Out of 248 faculty interactions 111(45%) are young faculty between the age group of 25-35, 86(35%) belong to 36-50 years and 51(20%) faculty are above 50 years. Male and female ratio is 43:57. Based on the experience, up to 5 years 99 faculty, between 5-15 years, 125 faculty and remaining 25 faculty selected as experienced above 15 years. The qualitative analysis is presented in the results section based on the responses from the teachers.

III. Analysis & Findings

The questionnaire is to investigate faculty members' awareness, experiences and adoption. Hence, the results are summarized in those three phases. Although there is widespread awareness and acknowledgement of the potential advantages of AI, such as improving educational inclusivity and accommodating different learning styles, many educators feel emotional strain and stress because they believe that AI tools do not align well with traditional teaching methods and reduce the quality of teacher-student interactions.

| A. | Experience and Awareness of AI | Choice-1 | Choice-2 | Choice-3 | Choice-4 |
|----|---|-----------------------------------|-------------------------------------|-------------------------------------|----------------|
| 1. | How aware are you of integrating AI technologies into the educational environment? | (72%) Aware | (25%) Somewhat aware | (2%) Neutral | (1%) Not aware |
| 2. | How do you feel about the use of AI in educational settings? | (30%) Seeking support from others | (22%) Taking breaks from technology | (48%) Ignoring the emotional impact | |
| 3. | Have you experienced AI recommendations or assessments that did not align with your preferred teaching methods? | (30) Yes frequently | (58) Yes occasionally | (12) No rarely | (0) No never |
| 4. | How has AI impacted the quality of teacher-student interactions? | (4) Enhanced interactions | (6) No significant change | (70) Decreased interactions | (20) Unsure |
| 5. | How does AI contribute to the development of critical thinking skills in students? | (5) Positively | (25) Negatively | (30) No significant impact | (40) Unsure |

| | | | | | |
|----------|---|-----------------------------------|-------------------------------------|-------------------------------------|------------------------|
| 6. | How has AI influenced your sense of autonomy and control over the learning process? | (70) Enhanced autonomy | (15) No noticeable change | (9) Reduced autonomy | (6) Not sure |
| 7. | Does AI in education foster a more competitive or collaborative learning environment? | (7) More competitive | (63) More collaborative | (25) No significant impact | (5) Unsure |
| 8. | Are you concerned about potential job displacement caused by AI? | (78) Somewhat concerned | (18) Extremely concerned | (3) Not concerned | (1) Not sure |
| 9. | Do you feel overwhelmed or stressed due to the use of AI-powered tools or assessments? | (40) Frequently | (38) Occasionally | (22) Rarely | (0) Never |
| 10. | What do you think is the emotional impact of AI-driven academic competition on students? | (68) Positive impact | (20) Negative impact | (12) Neutral | |
| B | Acceptance & Adoption of AI | Choice-1 | Choice-2 | Choice-3 | Choice-4 |
| 11 | How are you coping with the potential emotional strain caused by AI intrusion in education? | (30%) Seeking support from others | (22%) Taking breaks from technology | (48%) Ignoring the emotional impact | |
| 12 | To what extent do AI technologies in education cater to diverse learning styles and individual needs? | (31) Very effective | (63) Moderately effective | (6) Ineffective | |
| 13 | Does the intrusion of AI in education infringe on your personal privacy, causing emotional discomfort? | (5) Strongly agree | (32) Agree | (34) disagree | (29) Strongly disagree |
| 14 | Does the use of AI contribute to a more inclusive and accessible educational environment? | (51) Yes significantly | (41) Yes, to some extent | (3) No not much | (5) Unsure |
| 15 | Have you ever felt pressured to conform to AI-driven learning approaches even if they don't align with your preferred methods? | (15) Yes frequently | (62) Yes occasionally | (21) No rarely | (2) Never |
| 16 | To what extent do you think educational institutions should involve students in decision-making processes related to AI integration in education? | (20) They should play major role | (70) They should have minor role | (10) No involvement | |
| 17 | What is the overall emotional toll of AI intrusion on your educational experience? | (44) Very high | (35) High | (9) Low | (12) Very Low |
| 18 | Do you think there should be clear guidelines and regulations regarding the ethical use of AI in education to mitigate emotional strain? | (63) Strongly agree | (32) Agree | (4) Disagree | (1) Strongly disagree |
| 19 | To what extent do AI technologies in education cater to diverse learning styles and individual needs? | (31) Very effective | (63) Moderately effective | (6) Ineffective | |

Table 2: Consolidated Analysis of responses based on questionnaire

The data indicates that a significant majority of faculty members possess a strong understanding of the incorporation of AI technologies in education, with 72% of respondents being completely aware and 25% having some level of awareness. The fact that AI is widely recognised in the academic environment is a promising indication of its potential deployment. Nevertheless, the reactions to AI in terms of emotions are varied, with 48% disregarding the emotional consequences while others actively seeking assistance or taking breaks from technology. This indicates that although faculty members possess knowledge about AI, there is a notable emotional element that is hindering the integration of AI. This emotional aspect is creating tension as educators deal with the challenge of redefining their role in the learning process.

A significant proportion of participants (58%) sometimes experience a lack of alignment between AI recommendations and assessments with their teaching approaches, while 30% indicate that this occurs frequently. This lack of alignment could potentially lead to discontentment and a feeling of powerlessness among instructors. Moreover, a significant 70% of participants acknowledge a decline in the calibre of teacher-student engagements as a result of AI, highlighting a pressing obstacle: the possible deterioration of personal bonds in the field of education. Although AI can provide efficiency and personalisation, it seems to lack the ability to

sustain the interpersonal interactions that are essential for good teaching and learning. Furthermore, the replies suggest a lack of conviction regarding the extent to which AI has improved critical thinking abilities. Many educators believe that AI has not made a substantial impact on these capabilities.

Emotional strain is a significant problem that educators face. To deal with this, they use different coping mechanisms, such as seeking help, taking breaks, or disregarding the consequences. Nevertheless, there is a significant demand for ethical rules and laws, as 63% strongly support and 32% agree that these measures are important to alleviate mental stress. This consensus indicates a more widespread worry regarding the moral consequences of AI and the necessity for well-defined frameworks to direct its utilisation.

A significant majority of individuals, 78% to be precise, express some level of fear regarding job relocation, while 18% are extremely concerned. The faculty members' apprehension regarding the future of their roles signifies that, although they acknowledge the advantages of AI, they also harbour concerns about its capacity to disrupt their professional life. In addition, a significant majority of 62% of participants experience intermittent pressure to adhere to AI-driven methods that may not correspond with their chosen teaching approaches. This emphasises the existing conflict between innovation and traditional teaching practices.

AI is perceived as moderately effective in accommodating various learning styles, with a 63% approval rating. Nevertheless, a considerable proportion (31%) of individuals still hold the belief that AI is only very effective or completely ineffectual (6%). This indicates that AI's potential to cater to various educational requirements has not been fully actualized. Furthermore, the research suggests that AI has a role in promoting diversity and accessibility to a certain degree, although not overwhelmingly so, since just 51% see its major influence.

AI has a significant emotional impact on educators, with 44% considering it to be very high and 35% rating it as high. The presence of this emotional weight emphasises the necessity of support systems and resources to assist faculty in navigating the difficulties presented by the incorporation of AI. Despite these concerns, the general acceptance of AI shows a willingness among educators to adapt, provided that their emotional and professional challenges are acknowledged and addressed.

CONCLUSION AND FUTURE SCOPE

The study emphasizes that faculty members broadly acknowledge the potential advantages of AI in education. However, it also demonstrates that they experience significant emotional stress due to perceived discrepancies with conventional teaching approaches and concerns about the quality of teacher-student relationships. Faculty members strongly advocate for the implementation of ethical norms and support structures to effectively handle the emotional difficulties arising from the incorporation of AI. There is significant concern around the possibility of job loss and the expectation to adhere to AI-driven

approaches. Notwithstanding these uncertainties, educators demonstrate a readiness to adjust, given that their emotional and professional difficulties are recognized and resolved.

Given the current concerns of faculty members, there is a need to explore systematic and policy level steps taken to collectively acquaint and equip with them with strategies by institutions. These strategies should aim to cater to the individual and heterogeneous needs of varying demographics among the faculty fraternity which will give positive influence for best practices. Through the final suggestions by faculty, it is identified that developing tools with the level of customization as to not disrupt and invalidate the existing teaching methods adopted by the faculty so far becomes essential. The future research might focus on understanding evolving needs and developing an inclusive generative AI environment.

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